Their use in this case is perfectly sanctioned by custom and the authority of many of the best systematists. It is true that exactly what characters shall be used in generic definition can never be arbitrarily asserted nor established by rule; that will depend upon individual ability and tact. If Dr. Skinner does not like the Scudderian system, let him produce another for comparison with it. No positive advance can be made through wholesale criticism without constructive work.

BOOK NOTICES.

Les Moustiques, Histoire Naturelle et Médicale, Par RAPHAËL BLANCHARD, Professeur à la Faculté de Médecine de Paris, Membre de l'Académie de Médecine. Paris: F. R. de Rudeval, 1905.

The book contains 673 pages in seven chapters and an appendix, including introductory definitions, systematic account of the species, their pathological properties, prophylaxis, methods of collecting and breeding and a list of recently described species (appendix). The general account refers at some length to allied forms, *Simulium*, *Tipula*, *Dixa*, *Chironomus*, etc., with text figures. The Corethridæ are not included as mosquitoes. Theobald's classification is adopted, based as it is largely on unimportant scale characters, although somewhat modified by the introduction in the text of the subfamilies Sabettinæ and Joblotinæ to replace Theobald's nameless sections B and C. This is really a distinct improvement and approximates the classification to that of Lutz, epitomized on page 619. Figures of adults and larvæ are copied from various authors and inserted as text figures. This has resulted in some errors. On page 297 a figure of a larva is given as *confinis* Arrib.; it should be transferred to *jamaicensis* Theob., page 279. Page 403, *Aëdes smithii* should be transferred to *Wyeomyia* in the Sabethinæ. Errors of this nature are liable to occur in a compilation, such as Professor Blanchard's work essentially is, and are due to incomplete following up of the subsequent literature. Professor Blanchard is an enthusiastic follower of Theobald, and he has taken advantage of that author's remarkable ability in the creation of homonyms to propose a number of new and beautifully formed generic terms. He has also changed Theobald's badly made names into the proper grammatical forms, which we think he has no right to do. These names will have to stand as first proposed, bad as they are. Fortunately most of them will fall into the synonymy when the scale

characters on which they are founded are relegated to their proper place of subordination. Professor Blanchard's book is really a mine of information about mosquitoes. We only regret that he did not print his own synoptic tables and classification, which were prepared at much pains as he tells us, but thrown in the waste basket on seeing Theobald's book, in an access of enthusiasm, scarcely deserved, we fear. "Les Moustiques" should be in the hands of every student of mosquitoes.

A Monograph of the Anopheles Mosquitoes of India. By S. P. JAMES, M.B., I.M.S., and W. GLEN LISTON, M.D., I.M.S. Calcutta, 1904.

The authors find twenty-four species of *Anopheles* in India, of which they know the larvæ of eighteen. The adults are figured on a green background, which relieves the white scales beautifully and gives a very fine effect. The species should be easily recognized. Ten of the larvæ are figured. The larvæ all differ from the American species in the greater development of the fan-shaped dorsal tufts, which are present on the second abdominal segment in all cases and in many also on the first abdominal and on the metathorax. The larvæ must therefore have even a closer connection with the surface film of the water than is the case with our species. Most of the species have the front of the head triangularly produced and the antennæ much thickened, though some are more rounded like our species. *A. barbirostris* Van der Wulp is nearest in aspect to ours. The species are divided into two groups: first, with the antennal tuft branched (as in our species), containing three species; second, antennæ without branched hair, containing fifteen species. The first group is subdivided by the frontal hairs being simple or branched; the second by the presence or absence of the fan-shaped tuft on the thorax. The details of the frontal hairs and the fan-shaped tufts are used to separate the species. Six types of *Anopheles* eggs are shown (p. 39), which differ remarkably in the development and position of the "floats." This structure is present in all, though in *A. turkhudi* Liston it is reduced to a little dorsal ellipse near one pole of the egg. The authors reject Theobald's genera of the Anophelinæ founded on scale characters (with their reasons for rejection given in detail) and place all the species in *Anopheles*. They nevertheless divide them into ten groups on general affinity, but without any very sharp diagnostic characters.